

Kaushal

CRF Error Corrected by the STIC Systems Branch

1633 1610  
11/15/99

Serial Number: 09/205,658

CRF Processing Date: 11/15/99  
Edited by: AN  
Verified by: AN (STIC staff)

Changed a file from non-ASCII to ASCII

Changed the margins in cases where the sequence text was "wrapped" down to the next line.

Edited a format error in the Current Application Data section, specifically:

MAR 22 2000

TECH CENTER T600/2600

Edited the Current Application Data section with the actual current number. The number inputted by the applicant was  the prior application data; or  other

**ENTERED**

Added the mandatory heading and subheadings for "Current Application Data".

Edited the "Number of Sequences" field. The applicant spelled out a number instead of using an integer.

Changed the spelling of a mandatory field (the headings or subheadings), specifically:

Corrected the SEQ ID NO when obviously incorrect. The sequence numbers that were edited were:

Inserted or corrected a nucleic number at the end of a nucleic line. SEQ ID NO's edited:

Corrected subheading placement. All responses must be on the same line as each subheading. If the applicant placed a response below the subheading, this was moved to its appropriate place.

Inserted colons after headings/subheadings. Headings edited included:

Deleted extra, invalid, headings used by an applicant, specifically:

Deleted:  non-ASCII "garbage" at the beginning/end of files;  secretary initials/filename at end of file;  
 page numbers throughout text;  other invalid text, such as \_\_\_\_\_.

Inserted mandatory headings, specifically:

Corrected an obvious error in the response, specifically:

Edited identifiers where upper case is used but lower case is required, or vice versa.

Corrected an error in the Number of Sequences field, specifically:

A "Hard Page Break" code was inserted by the applicant. All occurrences had to be deleted.

Deleted ending stop codon in amino acid sequences and adjusted the "(A)Length:" field accordingly (error due to a PatentIn bug). Sequences corrected:

Other: seq 11 - moved cumulative base total over to left

\*Examiner: The above corrections must be communicated to the applicant in the first Office Action. DO NOT send a copy of this form.

3/1/95

PAGE: 1

RAW SEQUENCE LISTING  
PATENT APPLICATION US/09/205,658DATE: 11/15/1999  
TIME: 10:50:18

Input Set: I205658.RAW

This Raw Listing contains the General Information Section and those Sequences containing ERRORS.

```

1 <110> Ruvkun, Gary
2 Ogg, Scott
3 <120> THERAPEUTIC AND DIAGNOSTIC TOOLS FOR
4 IMPAIRED GLUCOSE TOLERANCE CONDITIONS
5 <130> 00786/351004
6 <140> US/09/205,658
7 <141> 1998-12-03
8 <150> 08/857,076
9 <151> 1997-05-15
10 <150> 08/888,534
11 <151> 1997-07-07
12 <150> US98/10080
13 <151> 1998-05-15
14 <160> 328
15 <170> FastSEQ for Windows Version 4.0

```

Does Not Comply  
Corrected Diskette Needed

## ERRORED SEQUENCES FOLLOW

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```

E--> 16 <210> 11
E--> 17 <211> 5816
E--> 18 <212> DNA
E--> 19 <213> Caenorhabditis elegans
E--> 20 <220>
E--> 21 <221> misc_feature
E--> 22 <222> (1)...(5816)
E--> 23 <223> n = A,T,C or G
E--> 24 <400> 11
E--> 25 ggttaatta cccaaatgg agctccaaga gcacacatct gatcgccga ttctactgta ← 60ctcc
W--> 26
E--> 27 a aaatttggaa 180gaagagaatc tcggcccgag ctgctcgctg acgacttcaa caaccgctgc ca
W--> 28
E--> 29 gacgacgagc acatcacaat gagacggctt 360cgacttgtca aaaattcgcg gacgcggcgt agaa
W--> 30
E--> 31 cattaatg ctttactgc tattcgctt tgtacagccg tgtgcctcaa 540tagtcggaaa acgatg
W--> 32 660gcacagtgg ggaagggtcg ctgacaatct catttgtact gaaacacaag acaaaagcac
E--> 33 ctgaagga ttagtggatt 840tgcgtaaaat ttcccataat cttcgtgtaa ttggaggccg ttgcgt
W--> 34
E--> 35 ataatc gaaaactgtg ctacacgaaa acgattgatt 1020ggaaacattt gatcacttct tccatcaa
W--> 36
E--> 37 gtca ttatttggag gaaaagaatc aggaacaagg tgtcgaaaga gttcagagtt 1200gttggtcgaa
W--> 38
E--> 39 gcggtt 1320gtgagcgtgt gaatgatgcc acagcatgcc acgcgtgcaa gaatgtctat cacaaggg

```

*more cumulative  
base totals  
over to  
left*

PAGE: 2

**RAW SEQUENCE LISTING**  
**PATENT APPLICATION US/09/205,658**

DATE: 11/15/1999  
 TIME: 10:50:18

Input Set: I205658.RAW

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 W--> 42  
 E--> 43 ag gcgatcaggc tatgcaatat tattgacgga aatctgacga 1680tcgagattcg cgaaaaacag g  
 E--> 44 0acatgttccg gaatttacga cgtattgagg caaagtcaact gttcagaaat ctatatgcta 1860tca  
 W--> 45  
 E--> 46 ag tatataaagc 1980agctaattgtc aaagttaaat ataccactcg atccgataga tcaatcagaa g  
 W--> 47  
 E--> 48 acattaccga tatagatcag cgaaagtttc 2160tcggctacga gctcttcttc aaagaagtcc cac  
 W--> 49  
 E--> 50 ccgaccggc gacattttta tggatattgg accgcgcgag cgaattcggc 2340cgaatacgct ctacg  
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 E--> 52 aatcgacaa cgcacgaaag 2640atccgaaaaga gacgattgtt gccgataagc cagtcgatata tccgt  
 W--> 53  
 E--> 54 atcgaag aatcatcgga acagaacaag aagaagcgac 2820cgatccgat gtcggcgatc gaatcat  
 W--> 55  
 E--> 56 ttgga aaaagctgaa aatttggaa aagctccaaa aactctcggt ggaaagaagc 3000cgctgatcc  
 W--> 57  
 E--> 58 acaagga 3120ttcggctcta cgagatctac gaaccttac ccggaagctg ggcgattaat gtatcag  
 W--> 59  
 E--> 60 gcatac ttgctcaata tcccattcg 3300cgggagcatt gaaacgaaca aaacacatca cagacattg  
 W--> 61  
 E--> 62 ttc gtttatgttg taaagcttaa gtcaaaagtc gatggatcaa 3480ttgttatgac gagatgtgtc  
 E--> 63 00gcgcggacc ggaagccaa tcctccgacc caatcgtcg catgacgcca ggcttcttca 3660ct  
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 E--> 65 gct ctatctgact 3780tttatgcaatt gaatccgaa tattgtgtgg acaataagta caatgcagac  
 W--> 66  
 E--> 67 c tgatgggtga tcgtttcgga ccgtgtgcta 3960ttaagattaa tgttagatgtat ccagcgtcga ct  
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 W--> 70  
 E--> 71 t 4260cgctcaagtt ttgccatcga gatctcgccg cacgttaattt catgataaat cgggatgaga  
 W--> 72  
 E--> 73 cgagtcgttggaaagacggaa 4440agtttgcactc gaaatctgtat gtttggagct tcggagttgt tctc  
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 E--> 75 cgaatgtt gtgaaaacta ttggatataag gtgtgaaaa 4620tgtgctggag atactcacct cgggat  
 W--> 76  
 E--> 77 tgacga ttccagaagca ctggatcttgg atgatatttga tgatactgtat atgaatgatc 4800agggttgtc  
 W--> 78  
 E--> 79 tgccacga 4920cgagtcattc gacaatatcg attgtgaga caccgatgaa agcgaagcag cgagaa  
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 W--> 82  
 E--> 83 acat ttaaatgtatg atgattatgt tgaaaaagag atatcatcca 5280tggatacgcg ccggagcag  
 E--> 84 400cagcagcagc agcagcagct ctccaaacagc aacaaaatgg tggtcgaggc gatcgattaa 5460c  
 W--> 85  
 E--> 86 aaac ggcaacagcc 5580gtgacattttt caacggacgt tcggcttgcgt gtgaaaatga gcatctaattc  
 W--> 87  
 E--> 88 tc ggatTTTTT tcagatTTTT tctgaaaaat 5760tctgaataat tttacccat tttcaaatc t

PAGE: 1

RAW SEQUENCE LISTING  
PATENT APPLICATION US/09/205,658

MAR 22 2000  
DATE: 11/16/1999  
TELECENTER 16005200

Input Set: I205658.RAW

This Raw Listing contains the General Information  
Section and up to first 5 pages.

1 <110> APPLICANT: Ruvkun, Gary  
 2 Ogg, Scott  
 3 <120> TITLE OF INVENTION: THERAPEUTIC AND DIAGNOSTIC TOOLS FOR  
 4 IMPAIRED GLUCOSE TOLERANCE CONDITIONS  
 5 <130> FILE REFERENCE: 00786/351004  
 6 <140> CURRENT APPLICATION NUMBER: US/09/205,658  
 7 <141> CURRENT FILING DATE: 1998-12-03  
 8 <150> EARLIER APPLICATION NUMBER: 08/857,076  
 9 <151> EARLIER FILING DATE: 1997-05-15  
 10 <150> EARLIER APPLICATION NUMBER: 08/888,534  
 11 <151> EARLIER FILING DATE: 1997-07-07  
 12 <150> EARLIER APPLICATION NUMBER: US98/10080  
 13 <151> EARLIER FILING DATE: 1998-05-15  
 14 <160> NUMBER OF SEQ ID NOS: 328  
 15 <170> SOFTWARE: FastSEQ for Windows Version 4.0  
 16 <210> SEQ ID NO 1  
 17 <211> LENGTH: 20  
 18 <212> TYPE: DNA  
 19 <213> ORGANISM: Artificial Sequence  
 20 <220> FEATURE:  
 21 <223> OTHER INFORMATION: Primer/probe derived from C. elegans  
 22 <400> SEQUENCE: 1  
 23 cgctacggca aaaaagtgaa  
 24 <210> SEQ ID NO 2  
 25 <211> LENGTH: 18  
 26 <212> TYPE: DNA  
 27 <213> ORGANISM: Artificial Sequence  
 28 <220> FEATURE:  
 29 <223> OTHER INFORMATION: Primer/probe derived from C. elegans  
 30 <400> SEQUENCE: 2  
 31 cgatgatgaa gatacccc  
 32 <210> SEQ ID NO 3  
 33 <211> LENGTH: 20  
 34 <212> TYPE: DNA  
 35 <213> ORGANISM: Artificial Sequence  
 36 <220> FEATURE:  
 37 <223> OTHER INFORMATION: Primer/probe derived from C. elegans  
 38 <400> SEQUENCE: 3  
 39 tgatgcgaac ggcgatcgat  
 40 <210> SEQ ID NO 4  
 41 <211> LENGTH: 20  
 42 <212> TYPE: DNA  
 43 <213> ORGANISM: Artificial Sequence  
 44 <220> FEATURE:

20

18

20

PAGE: 2

RAW SEQUENCE LISTING  
PATENT APPLICATION US/09/205,658DATE: 11/16/1999  
TIME: 16:33:52

Input Set: I205658.RAW

45 <223> OTHER INFORMATION: Primer/probe derived from C. elegans  
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48 <210> SEQ ID NO 5  
49 <211> LENGTH: 22  
50 <212> TYPE: DNA  
51 <213> ORGANISM: Artificial Sequence  
52 <220> FEATURE:  
53 <223> OTHER INFORMATION: Primer/probe derived from C. elegans  
54 <400> SEQUENCE: 5 22  
55 ggttaatta cccaaagttt ag  
56 <210> SEQ ID NO 6  
57 <211> LENGTH: 20  
58 <212> TYPE: DNA  
59 <213> ORGANISM: Artificial Sequence  
60 <220> FEATURE:  
61 <223> OTHER INFORMATION: Primer/probe derived from C. elegans  
62 <400> SEQUENCE: 6 20  
63 gctcacgggt cacacaacga  
64 <210> SEQ ID NO 7  
65 <211> LENGTH: 20  
66 <212> TYPE: DNA  
67 <213> ORGANISM: Artificial Sequence  
68 <220> FEATURE:  
69 <223> OTHER INFORMATION: Primer/probe derived from C. elegans  
70 <400> SEQUENCE: 7 20  
71 tgatgcgaac ggcatcgat  
72 <210> SEQ ID NO 8  
73 <211> LENGTH: 21  
74 <212> TYPE: DNA  
75 <213> ORGANISM: Artificial Sequence  
76 <220> FEATURE:  
77 <223> OTHER INFORMATION: Primer/probe derived from C. elegans  
78 <400> SEQUENCE: 8 21  
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80 <210> SEQ ID NO 9  
81 <211> LENGTH: 20  
82 <212> TYPE: DNA  
83 <213> ORGANISM: Artificial Sequence  
84 <220> FEATURE:  
85 <223> OTHER INFORMATION: Primer/probe derived from C. elegans  
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88 <210> SEQ ID NO 10  
89 <211> LENGTH: 20  
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91 <213> ORGANISM: Artificial Sequence  
92 <220> FEATURE:  
93 <223> OTHER INFORMATION: Primer/probe derived from C. elegans  
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**RAW SEQUENCE LISTING**  
**PATENT APPLICATION US/09/205,658**

DATE: 11/16/1999  
 TIME: 16:33:52

Input Set: I205658.RAW

20

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95      gacgatcccc aggtgagttat
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97 <211> LENGTH: 5816
98 <212> TYPE: DNA
99 <213> ORGANISM: Caenorhabditis elegans
100 <220> FEATURE:
101 <221> NAME/KEY: misc_feature
102 <222> LOCATION: (1)...(5816)
103 <223> OTHER INFORMATION: n = A,T,C or G
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107 atgacgagaa tgaatattgt cagatgtcgg agacgacaca aaattttgga aaatttgaa 180
108 gaagagaatc tcggcccgag ctgctogtc acgacttcaa caaccgctgc caccgaagct 240
109 ctcggaaacaa ccactgagga tatgaggctt aagcagcgcg gaagctcg tcgtgccacg 300
110 gagcagata ttgtcgacgg caatcaccac gacgacgacg acatcacaat gagacggctt 360
111 cgacttgtca aaaattcgcg gacgcccgtt agaacgcgcg ccgattcaag tatggactgc 420
112 tatgaggaaa accggccatc acaaaaactt caataaaatattt ttcttgatt tctaaaaatg 480
113 catcaatgac gtcattaatg cttttactgc tattcgctt tgtacagccg tttgcctcaa 540
114 tagtcgaaaa acatgcggc ccaatcgata ttgaaatag gccgtggat attaagccgc 600
115 aatggtcgaa acttgggtat ccgaacgaaa aagatttgc tggtcagaga atggtaact 660
116 gcacagtggt ggaagggttcg ctgacaatct catttgactt gaaacacaag acaaaaagcac 720
117 aagaagaaat gcatcgaaatg ctacagccaa gatattccca agacgaattt atcacttttc 780
118 cgcacatctacg tggaaattact ggaactctgc tcgttttgc gactgaagga tttagtggatt 840
119 tgcgtaaaat ttcccaat cttcgtaa ttggaggccg ttgcgtgatt caacactatg 900
120 cgctgataat ttatcgaaat ccggatttgg agatcggtc tgacaagctt tccgtaattc 960
121 gaaatggtg tgtaacggata atcgataatc gaaaactgtg ctacacgaaa acgattgatt 1020
122 ggaaacattt gatcacttct tccatcaacg atgttgcgt tgataatgct gcccgtacg 1080
123 ctgtcaactgaa gactggattt atgtgcccac gtggagctt cgaagaggat aaaggcgaat 1140
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125 gttggcgaa caccacttgc caaaagtctt gtgcttatgatc tcgtcttctt ccaacgaaag 1260
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127 gttgagctgtt gaatgtatgcc acagcatgcc acgcgtcgaat gatgtctat cacaaggaa 1380
128 agtgtatcgaa aatgtgtat gtcacactgtt accttctctt tcaacgtcgt tttgtgaccc 1440
129 gtgagcagtg tctcgacgtg aatccggcgc tctcgaaacaa aacagtgcct atcaaggcga 1500
130 cggcaggcct ttgcgtggat aaatgtcccg atggttatca aatcaaccccg gatgatcatc 1560
131 gagaatgccg aaaatgcgtt ggcgaatgtg agattgtgtg cgagatcaat cacgtcattt 1620
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133 tcgagattcg cggaaaaacag gattcggaa tggcgccoga gttgaaggat atatttgcga 1740
134 acattcacac gatcaccggc tacctgttgg tacgtcaatc gtcaccgtt atctcggtt 1800
135 acatgttccg gaatttacga cgtattgagg caaagtcaat gttcagaaat ctatatgcta 1860
136 tcacagtttt tggaaatcgaa aataaaaaa agtattcgaa ttcaacgcg gatttgcgc 1920
137 ttgatcggtt aactgtgtca attgccaata acaagatgtt atgcttcaag tatatcaagc 1980
138 agctaattgtc aaagttaaat ataccactcg atccgataga tcaatcagaa gggacaaatg 2040
139 gtgagaaggn aatctgtgag gatatggcaa tcaacgtcgtt catcacagcg gtcacacgc 2100
140 actcggtctt ctttagttgg ccctcattca acattaccga tataatcg cggaaatgtt 2160
141 tcggctacga gtccttcttcc aaagaagtcc cacgaatcgatc tgagaacatg acgatcgaa 2220
142 aggatcgaaatg tgcgtgtgc gattcgtggc aggtgtctt caaacagtcg tacgagacgt 2280
143 cgaacgggtga accgaccccg gacatttta tggatattgg accgcgcgag cgaattcgcc 2340
144 cgaataacgtt ctacgcgtac tatgtggcgat cgcagatgtt gttgcgtcc ggtgcgaaga 2400

```

W--OK

PAGE: 4

**RAW SEQUENCE LISTING**  
**PATENT APPLICATION US/09/205,658**

DATE: 11/16/1999  
 TIME: 16:33:52

Input Set: I205658.RAW

145	acggtgtatc	gaagatttgtt	tttgtgagga	cgagctacta	tacgcctgat	cctccgacgt	2460
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179	agtttgactc	gaaatctgt	gtttggagct	tcggagttgt	tctctatgaa	atggttacac	4500
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190	cgcgacgaaa	tactgtgtca	tcaacatcaa	tttacacagg	tgggttcc	tattgcctaa	5160
191	caaatacg	tggatgtgg	aatgtggacat	ttaatgtatgt	tgaaaaagag	atatcatcca	5220
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193	ggagtgaaa	tcgtgggtgc	acgtattata	cgagtaaaagc	tcaacaggca	gcaactgcag	5340
194							5400

PAGE: 5

**RAW SEQUENCE LISTING**  
**PATENT APPLICATION US/09/205,658**

DATE: 11/16/1999  
 TIME: 16:33:52

Input Set: I205658.RAW

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203 <211> LENGTH: 1724
204 <212> TYPE: PRT
205 <213> ORGANISM: Caenorhabditis elegans
206 <400> SEQUENCE: 12
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207 1 5 10 15
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208 20 25 30
Pro Trp Asp Ile Lys Pro Gln Trp Ser Lys Leu Gly Asp Pro Asn Glu
209 35 40 45
Lys Asp Leu Ala Gly Gln Arg Met Val Asn Cys Thr Val Val Glu Gly
210 50 55 60
Ser Leu Thr Ile Ser Phe Val Leu Lys His Lys Thr Lys Ala Gln Glu
211 65 70 75 80
Glu Met His Arg Ser Leu Gln Pro Arg Tyr Ser Gln Asp Glu Phe Ile
212 85 90 95
Thr Phe Pro His Leu Arg Glu Ile Thr Gly Thr Leu Leu Val Phe Glu
213 100 105 110
Thr Glu Gly Leu Val Asp Leu Arg Lys Ile Phe Pro Asn Leu Arg Val
214 115 120 125
Ile Gly Gly Arg Ser Leu Ile Gln His Tyr Ala Leu Ile Ile Tyr Arg
215 130 135 140
Asn Pro Asp Leu Glu Ile Gly Leu Asp Lys Leu Ser Val Ile Arg Asn
216 145 150 155 160
Gly Gly Val Arg Ile Ile Asp Asn Arg Lys Leu Cys Tyr Thr Lys Thr
217 165 170 175
Ile Asp Trp Lys His Leu Ile Thr Ser Ser Ile Asn Asp Val Val Val
218 180 185 190
Asp Asn Ala Ala Glu Tyr Ala Val Thr Glu Thr Gly Leu Met Cys Pro
219 195 200 205
Arg Gly Ala Cys Glu Glu Asp Lys Gly Glu Ser Lys Cys His Tyr Leu
220 210 215 220
Glu Glu Lys Asn Gln Gln Gly Val Glu Arg Val Gln Ser Cys Trp
221 225 230 235 240
Ser Asn Thr Thr Cys Gln Lys Ser Cys Ala Tyr Asp Arg Leu Leu Pro
222 245 250 255
Thr Lys Glu Ile Gly Pro Gly Cys Asp Ala Asn Gly Asp Arg Cys His
223 260 265 270
Asp Gln Cys Val Gly Gly Cys Glu Arg Val Asn Asp Ala Thr Ala Cys
224 275 280 285
His Ala Cys Lys Asn Val Tyr His Lys Gly Lys Cys Ile Glu Lys Cys
225 290 295 300

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**Please Note:**

Use of n and/or Xaa have been detected in the Sequence Listing. Please review the Sequence Listing to ensure that a corresponding explanation is presented in the <220> to <223> fields of each sequence which presents at least one n or Xaa.

VERIFICATION SUMMARY  
PATENT APPLICATION US/09/205,658DATE: 11/16/1999  
TIME: 16:33:52

Input Set: I205658.RAW

Line ? Error/Warning

Original Text

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 Glu Gln Cys Cys Xaa Xaa Cys Xaa Xaa X  
 Pro Cys Thr Xaa Xaa Xaa Gln Glu Asp Met A  
 Leu Cys Asn Xaa Xaa Xaa Gln Glu Gly Lys A  
 Ala Cys Glu Xaa Xaa Xaa Ser Thr Glu Val A  
 Pro Cys Glu Xaa Xaa Xaa Gly Thr Glu Gln A  
 Glu Cys Ser Xaa Xaa Xaa Ser Thr Asn Glu A  
 Cys Asp Thr Xaa Xaa Xaa Asp Ser Ser Glu A  
 Arg Gly Phe Xaa Xaa Xaa Leu Gln Lys Arg G  
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 Arg Gly Phe Xaa Xaa Xaa Lys Met Lys Arg G  
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 Asn Tyr Asn Xaa Xaa Xaa Arg Arg Thr Arg G  
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 Val Glu Lys Xaa Xaa Xaa Arg Gly Lys Arg G  
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 Gln Tyr Leu Xaa Xaa Xaa Gly Lys Arg Gln G  
 Gln Leu Cys Xaa Xaa Xaa Gln Lys Arg Gly G  
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 Ser Thr Trp Xaa Xaa Xaa Arg Pro Tyr Val A  
 Pro Arg Trp Xaa Xaa Xaa Ala Ala Ala Thr A  
 His Gln Lys Xaa Xaa Xaa Xaa Xaa Xaa Xaa X  
 Gly Trp Asp Xaa Xaa Ile Ala Pro Lys  
 Arg Xaa Xaa Ile Xaa Xaa Gly

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**RAW SEQUENCE LISTING**  
**PATENT APPLICATION US/09/205,658**

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 TIME: 16:33:52

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**PREVIOUSLY ERRORED SEQUENCES-EDITED**

---

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3 <212> DNA
4 <213> Caenorhabditis elegans
5 <220>
6 <221> misc_feature
7 <222> (1)...(5816)
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12 atgacgagaa tgaatattgt cagatgtcg agacgcacaca aaattttgga aaattttgaa 180
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48  
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**RAW SEQUENCE LISTING**  
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**RAW SEQUENCE LISTING**  
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